| | TRANSMITTAL LETTER TO | O THE UNITED STATES | ATTORNEY'S DOCKET NO. | | | | | | | |
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| | DESIGNATED/ELECTED | 1003301-000277 | | | | | | | | |
| | CONCERNING A SUBMISSI | | U.S. APPLICATION NO. (If known) | | | | | | | |
| INITEDA | IATIONAL APPLICATIONING | INITEDNIATIONAL EU INIC DATE | 10/585,054 | | | | | | | |
| INTERN | IATIONAL APPLICATION NO. | INTERNATIONAL FILING DATE | PRIORITY DATE CLAIMED | | | | | | | |
| TITLE | PCT/SE2005/000054 OF INVENTION | 19 January 2005 | 04 February 2004 | | | | | | | |
| | A DERIVATIVES | | | | | | | | | |
| <u> </u> | ANT(S) FOR DO/EO/US | | | | | | | | | |
| ABRAN Anette | MO, Aina Lisbeth, PETTERSSON | N, Lars Olof Goran, ANDERSSON, K | erstin Ingalill and SUNDSTEDT, Asa | | | | | | | |
| | t herewith submits to the United States D | Designated/Elected Office (DO/EO/US) the following | owing items and other information: | | | | | | | |
| 1. | This is a FIRST submission of item | ns concerning a submission under 35 U.S | S.C. 371. | | | | | | | |
| 2. 🛛 | | NT submission of items concerning a sul | | | | | | | | |
| 3. 🖾 | This is an express request to begin national examination procedures (25 LLS C 371(f)). The submission must | | | | | | | | | |
| 4. | The US has been elected (Article 3 | | | | | | | | | |
| 5. 🔲 | A copy of the International Applica | tion as filed (35 U.S.C. 371(c)(2)) | | | | | | | | |
| | a. is attached hereto (requir | ed only if not communicated by the Intern | national Bureau). | | | | | | | |
| | b. has been communicated | by the International Bureau. | , and the second | | | | | | | |
| | c. is not required, as the application was filed in the United States Receiving Office (RO/US). | | | | | | | | | |
| 6. | | the International Application as filed (35 | | | | | | | | |
| _ | a. is attached hereto. | | | | | | | | | |
| | _ | nitted under 35 U.S.C. 154(d)(4). | | | | | | | | |
| 7. | | nternational Application under PCT Article | e 19 (35 U.S.C. 371(c)(3)) | | | | | | | |
| | | ired only if not communicated by the Inte | | | | | | | | |
| | _ | by the International Bureau. | | | | | | | | |
| | <u> </u> | vever, the time limit for making such ame | ndments has NOT expired | | | | | | | |
| | d. \(\begin{aligned} \text{have not been made, not} \\ \text{d.} \(\begin{aligned} \text{have not been made and} \\ \text{d.} \(\begin{aligned} \text{have not been made and} \\ \text{d.} \(\begin{aligned} \text{have not been made.} \\ \text{d.} \(\text{d.} \) | | naments has 140 r expired. | | | | | | | |
| 8. 🗆 | | | T Article 10 (25 H S.C. 271(e)(3)) | | | | | | | |
| | | the amendments to the claims under PC | 1 Article 19 (33 0.3.0. 37 1(c)(3)). | | | | | | | |
| 9. 📙 | An english language translation of | the annexes of the International Prelimin | an/ Examination Report under | | | | | | | |
| 10. | PCT Article 36 (35 U.S.C. 371(c)(5 | 5)). | ary Examination Report under | | | | | | | |
| | s 11 to 20 below concern document(s | | | | | | | | | |
| 11. 🛛 | | e Statement under 37 CFR 1.97 and 1.98 | | | | | | | | |
| 12. | included. | ding. A separate cover sheet in compliar | ice with 37 CFR 3.26 and 3.31 is | | | | | | | |
| 13. 📗 | A preliminary amendment. | | | | | | | | | |
| 14. 📗 | An Application Data Sheet under 3 | 7 CFR 1.76. | | | | | | | | |
| 15. 🗌 | A substitute specification. | | | | | | | | | |
| 16. 🔲 | A power of attorney and/or change | of address letter. | | | | | | | | |
| 17. 🔲 | A computer-readable form of the s | equence listing in accordance with PCT F | Rule 13 <i>ter</i> .2 and 37 CFR 1.821-1.825. | | | | | | | |
| 18. 🔲 | A second copy of the published Int | ernational Application under 35 U.S.C. 15 | 54(d)(4). | | | | | | | |
| 19. 🔲 | A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4). | | | | | | | | | |

20.

Other items or information: _____

 U.S. APPLICATION NO. (If known)
 INTERNATIONAL APPLICATION NO.
 ATTORNEY'S DOCKET NO.

 10/585,054
 PCT/SE2005/000054
 1003301-000277

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| The following fees have been submitted: CALCULATIONS PTO USE ONLY | | | | | | | | | | |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------|---------------------------------------|-----------------------------------------------------------|--------------------|------------------------|-----------|------------|----------------|
| 21. 🔲 B | Basic N | latior | nal fee (3 | 7 CFR 1. | 492(a)) | (16: | 31) \$ 300 | \$ | 0 | |
| 22. 🔲 E | Examination fee (37 CFR 1.492(c)) | | | | | | | | | |
| | If the written opinion prepared by ISA/US or the international preliminary | | | | | | | | | |
| | examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) (1643) \$ 0 | | | | | | _ | | | |
| | | | • • • • • | | | • | 1643) \$ 0 | | | |
| | All othe | | | 4 40041 >> | | (10. | 33) \$ 200 | \$ | 0 | |
| | | - | • | 1.492(b)) | | !:: | | | | |
| | If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article | | | | | | | | | |
| | 33(1)-(4 | • | ica by ii | L/ 000 II | idiodico dii oldiiilo odiloiy | - | 1640) \$ 0 | | | |
| S | Search fee (37 CFR 1.445(a)(2)) has been paid on the international application | | | | | | • | | | |
| | | | | | onal Searching Authority | | 41) \$ 100 | | | |
| | | | | | repared by an ISA other to imunicated to the US by t | | provided 42) \$ 400 | | | |
| | All othe | | • | outly con | | · | 32) \$ 500 | \$ | 0 | |
| | <u>.</u> | - | 21, 22 Ai | ND 23 = | <u>, , , , , , , , , , , , , , , , , , , </u> | | | | | |
| | | | | | s and drawings filed in pa | aner over 100 sh | neets | \$ | 0.00 | |
| | | | • | | compliance with 37 CFR | ▼ | | | | |
| i c | omput | er pr | ogram lis | sting in an | electronic medium) (37 | CFR 1.492(j)). | | | | |
| T | he fee | is \$ | <u>250 (168</u> | | ch additional 50 sheets of each additional 50 or fraction | | on thereof. | - | | |
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| Total claims | S | | 20 | - 20 = | 0 | x \$ 50 (1615) | | \$ | 0 | |
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| MULTIPLE | DEPEN | NDEN | IT CLAIM(| S) (if appli | cable) | + \$ 360 (1616) | | \$ | 0 | |
| TOTAL OF | ABOV | E ÇA | LCULATI | ONS = | | | | \$ | 0.00 | |
| ☐ Apr | plicant o | claims | s small en | tity status. | See 37 CFR 1.27. Fees at | oove are reduced | by 1/2 | | 0 | |
| SUBTOTAL | L = | • | | · · · · · · · · · · · · · · · · · · · | | | | \$ | 0.00 | |
| Processing | fee of S | \$ 130 | (1618) for | r furnishing | the English translation late | r than 30 months f | from the | - | 0.00 | |
| earliest clair | med pri | iority | date (37 C | FR 1.492 | (i)). | | + | | 0 | |
| TOTAL NA | | | | ··· | | | | \$ | 0.00 | _ |
| | _ | | | _ | 37 CFR 1.21(h)). The assig , 3.31).\$ 40 per property | inment must be ac | companied + | | | |
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| | | | • | | nit under 37 CFR 1.495 lore the International Ap | | | | vive (37 C | FR 1.137(a) or |
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| Alexandria, | • | 2313 | 3-1404 | | | | | | | |
| 703 836 66 | | | | | - | Benton S. Duffe | tt, Jr. | | | 22030 |
| Date: Septe | te: <u>September 25, 2006</u> NAME REGISTRATION NO. | | | | | | | | | |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re f | Patent Application of |) | MAIL STOP PCT | | | | | |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------|--|--|--|--|--|
| Aina l | isbeth ABRAMO et al. |) | Attention: DO/EO/US | | | | | |
| Applic | ation No.: 10/585,054 |) | Group Art Unit: Unassigned | | | | | |
| Filing | Date: June 30, 2006 | į (| Examiner: Unassigned | | | | | |
| Title: | DIUREA DERIVATIVES |) | Confirmation No.: Unassigned | | | | | |
| | | SECOND ION DISCLOSU RANSMITTAL L | RE STATEMENT ETTER | | | | | |
| P.O. E | nissioner for Patents Box 1450 ndria, VA 22313-1450 | | | | | | | |
| Sir: | | | | | | | | |
| form F | Enclosed is a SECOND Info PTO-1449 for the above-identi | | re Statement (IDS) and accompanying cation. | | | | | |
| | No additional fee for submission of an IDS is required. | | | | | | | |
| | The fee of \$ 180 as set forth in 37 C.F.R. § 1.17(p) is also enclosed. | | | | | | | |
| | A statement under 37 C.F.R | . § 1.97(e) is als | o enclosed. | | | | | |
| | A statement under 37 C.F.R 37 C.F.R. § 1.17(p) are also | • , , | he fee of \$ 180 as set forth in | | | | | |
| | Charge to | Deposit Accoun | t No. 02-4800 for the fee due. | | | | | |
| | A check in the amount of | is | s enclosed for the fee due. | | | | | |
| | Charge to | credit card for th | e fee due. Form PTO-2038 is attached. | | | | | |
| \boxtimes | The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate. | | | | | | | |
| | | Respectfully su | bmitted, | | | | | |
| | | Buchanan Ingi | ERSOLL & ROONEY PC | | | | | |
|)ate | September 25, 2006 | By: Dente | as the lifeth h. | | | | | |

Benton S. Duffett, Jr.

Registration No. 22030

P.O. Box 1404 Alexandria, VA 22313-1404 703 836 6620

Attorney's Docket No. 1003301-000277

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Patent Application of) | MAIL STOP PCT |
|-------------------------------|------------------------------|
| Aina Lisbeth ABRAMO et al. | Attention: DO/EO/US |
| Application No.: 10/585,054 | Group Art Unit: Unassigned |
| Filed: June 30, 2006 | Examiner: Unassigned |
| For: DIUREA DERIVATIVES) | Confirmation No.: Unassigned |

SECOND INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98.

This will supplement the earlier Information Disclosure Statement filed on June 30, 2006.

Copies of the following publications that are identified in Applicants' Specification at Pages 40 and 41 are provided.

- (1) Abbas, Abul K. et al., *Nature*, Volume 383, October 31, 1996, Pages 787-793, "Functional Diversity of Helper T Lymphocytes".
- (2) Blessing, Jack J.H., *Current Pharmaceutical Design*, Volume 9, 2003, Pages 265-278, "Autoimmune Lymphoproliferative Syndrome (ALPS)".
- (3) Eguchi, Katsumi, *Internal Medicine*, Volume 40, No. 4, April 2001, Pages 275-284, "Apoptosis In Autoimmune Diseases".
- (4) Sacca, Rosalba, et al., *Current Opinion in Immunology*, Volume 9, 1997, Pages 851-857, "Mediators of Inflammation".
- (5) Tang, Dean G. et al., *Pathology Oncology Research*, Volume 2, No. 3, 1996, Pages 117-131, "Apoptosis: A Current Molecular Analysis".

(6) Van Engeland, Manon et al., *Cytometry*, Volume 31, 1998, Pages 1-9, "Annexin V-Affinity Assay: A Review on an Apoptosis Detection System Based On Phosphatidylserine Exposure".

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- (7) Waldmann, Thomas A., *Immunology Today*, Volume 14, No. 6, 1993, Pages 264-270, "The IL-2/IL-2 Receptor System: A Target for Rational Immune Intervention".
- (8) Waldmann, Thomas A. et al., *Immunology*, Volume 14, February 2001, Pages 105-110, "Contrasting Roles of IL-2 and IL-15 in the Life and Death of Lymphocytes: Implications for Immunotherapy".
- (9) Willingham, Mark C., *The Journal of Histochemistry and Cytochemistry*, Volume 47(9), 1999, Pages 1101-1109, "Cytochemical Methods for the Detection of Apoptosis".
- (10) White, A.K. et al., *Leukemia*, Volume 15, 2001, Pages 1011-1021, "Suppression of Apoptosis: Role in Cell Growth and Neoplasia".

A copy of Aulton, M.E., *Pharmaceutics*, 1988, 678 pages, "The Science of Dosage Form Design", Churchill Livingstone (ISBN:0443055173), which is identified at Page 40 of the Specification is not being provided with this submission since it constitutes an entire book. However, should the Examiner desire to inspect this and lacks access to a copy of the book, please notify the undersigned attorney and an effort will be made to acquire and to supply the book for the convenience of the Examiner.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

By:

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: September 25, 2006

Benton S. Duffett, Jr

Registration No. 22030

P.O. Box 1404 Alexandria, VA 22313-1404 703 836 6620

Substitute for form 1449/PTO & 1449B/PTO

SECOND INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| Complete if Known | | | | | |
|----------------------|----------------------------|--|--|--|--|
| Application Number | 10/585,054 | | | | |
| Filing Date | June 30, 2006 | | | | |
| First Named Inventor | Aina Lisbeth Abramo et al. | | | | |
| Examiner Name | Unassigned | | | | |
| Attorney Docket No. | 1003301-000277 | | | | |

| | | U.S. PAT | FENT DOCUMENTS | |
|----------------------|--------------------|-------------------------|-------------------------------------------------|----------------------------------------|
| Examiner Initials | Document Number | Kind Code (if known) | Name of Patentee or Applicant of Cited Document | Issue/Publication Date (MM-DD-YYYY) |
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| | | FOR | EIGN PATENT D | OCUMENTS | | | | | | | |
|----------------------|--------------------|-------------------------|---------------|----------------------------------|-------------|------------------------|-----------------------|------------------|------|----------|---------------|
| | | | · · | | | | | STATUS | 3 | | |
| Examiner Initials | Document Number | Kind Code (if known) | Country | Date of Publication (MM-DD-YYYY) | Translation | Partial Translation | Eng. Lang. Summary | Search Report | IPER | Abstract | Cited in Spec |
| | | | | | | | | | | | |

| | NON-PATENT LITERATURE DOCUMENTS |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Examiner Initials | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
| | Abbas, Abul K. et al., <i>Nature,</i> Volume 383, October 31, 1996, Pages 787-793, "Functional Diversity of Helper T Lymphocytes". |
| | Blessing, Jack J.H., Current Pharmaceutical Design, Volume 9, 2003, Pages 265-278, Autoimmune Lymphoproliferative Syndrome (ALPS). |
| | Eguchi, Katsumi, <i>Internal Medicine</i> , Volume 40, No. 4, April 2001, Pages 275-284, "Apoptosis In Autoimmune Diseases". |
| • | Sacca, Rosalba, et al., <i>Current Opinion in Immunology</i> , Volume 9, 1997, Pages 851-857, "Mediators of Inflammation". |
| | Tang, Dean G. et al., <i>Pathology Oncology Research</i> , Volume 2, No. 3, 1996, Pages 117-131, "Apoptosis: A Current Molecular Analysis". |
| | Van Engeland, Manon et al., <i>Cytometry</i> , Volume 31, 1998, Pages 1-9, "Annexin V-Affinity Assay: A Review on an Apoptosis Detection System Based On Phosphatidylserine Exposure". |
| | Waldmann, Thomas A., <i>Immunology Today</i> , Volume 14, No. 6, 1993, Pages 264-270, "The IL-2/IL-2 Receptor System: A Target for Rational Immune Intervention". |
| | Waldmann, Thomas A. et al., <i>Immunology</i> , Volume 14, February 2001, Pages 105-110, "Contrasting Roles of IL-2 and IL-15 in the Life and Death of Lymphocytes: Implications for Immunotherapy". |
| | Willingham, Mark C., <i>The Journal of Histochemistry and Cytochemistry</i> , Volume 47(9), 1999, Pages 1101-1109, "Cytochemical Methods for the Detection of Apoptosis". |
| i e | White, A.K. et al., <i>Leukemia</i> , Volume 15, 2001, Pages 1011-1021, "Suppression of Apoptosis: Role in Cell Growth and Neoplasia". |

| Examiner | Date | |
|-----------|------------|--|
| Signature | Considered | |